Hazard Prevention & Control

Safety & Health Management System Series-Installment IV

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&

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OBJECTIVES

- Discuss Why Hazard Recognition Is Important
- Identify Techniques and Program for Hazard Recognition & Control
- Discuss Hierarchy of Hazard Control
- Share Best Practice Examples in Hazard Prevention & Control

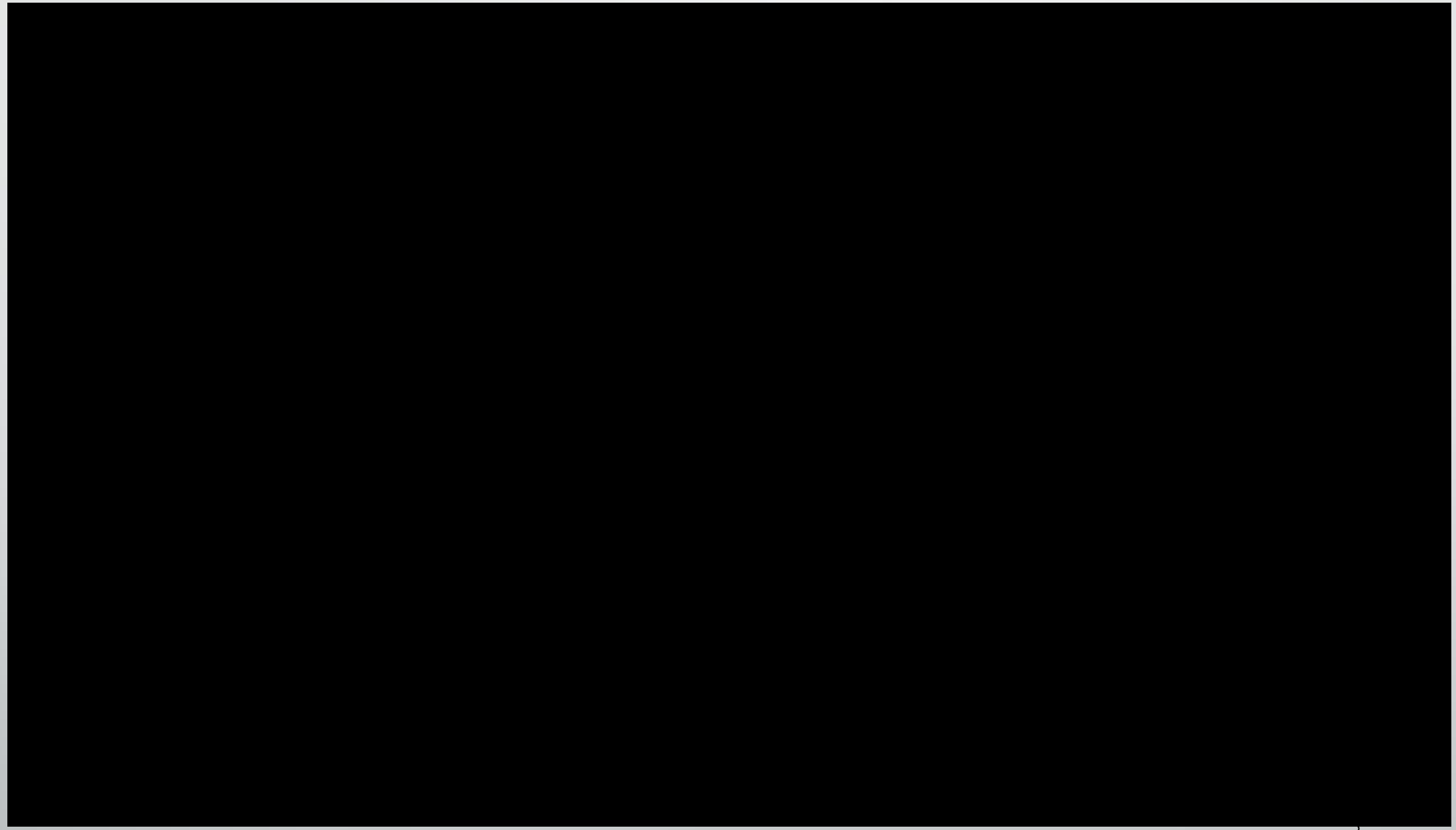
EMPLOYER'S RESPONSIBILITY

- To provide all workers a safe and healthy workplace free from serious recognized hazards which can cause death or serious physical harm

(GENERAL DUTY)

JOB HAZARD

A job hazard is anything at work that can hurt you either physically or mentally.



https://youtu.be/ToDZXeHgdUc

COMMON WORKPLACE HAZARDS

- Work surface and walkway
- Machinery
- Chemical
- Environmental
- Electrical
- Ergonomic
- Unsafe work practices

HAZARD RECOGNITION

- Why are people getting hurt and damages occurring
- Where the hazards are originating
- How to identify hazards
- What to do to control an identified hazard
- When to practice hazard recognition and control

"A good way to think about addressing hazards in the workplace is, "Fix the workplace, not the worker."

"

THINK TANK

TECHNIQUES

- Establish a team
- Training
- Inspection Procedures
- Inspection Timelines
- Inspection Reports & Review
- Hazard Reporting System

Controlling the Hazard

TEAM APPROACH

- Safety Committee/Team-vs-Safety Meetings
  - Work operation
  - Number of employees
- Equal number of employer-selected members and employee volunteer members.
- If committee/team agrees, there can be a majority of employee volunteers.
- Establish timelines for meeting

All available employees must attend safety meetings. At least one person must have management authority to ensure that hazards discussed are corrected.

TEAM APPROACH

- Committee/Team-selected Leader
- Establish timelines for serving, when possible
- Train all members on accident and incident investigation principles
- Train all members in hazard identification and correction methods
- Train all members to identify and address unsafe work practices
- Establish a Hazard Reporting System
- Maintain safety committee/team meeting minutes

INSPECTION PROCEDURES

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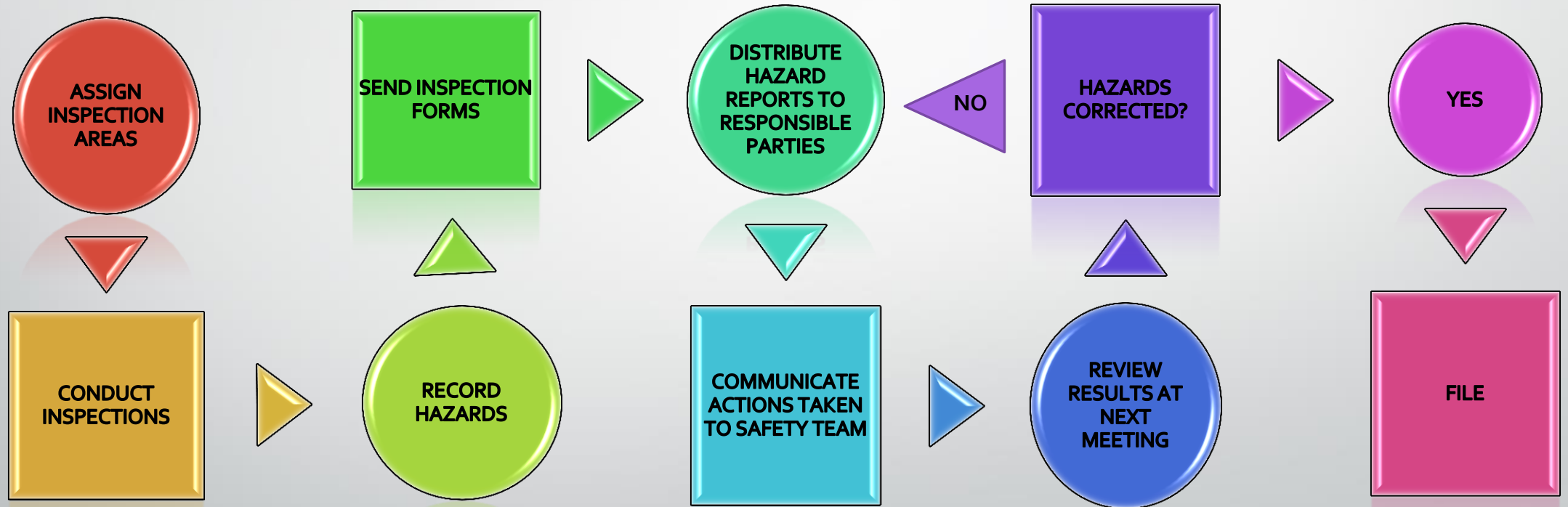
INSPECTION PROCEDURES



INSPECTION PROCEDURES

- Determine frequency of inspections
- Follow the flow of the process
- Prioritize
  - Probability
  - Severity

EMPLOYEE'S RESPONSIBILITY

- Ownership
  - Safety is not just the manager's responsibility.
  - Identify and report hazards
  - Follow safe work practices
  - Training
  - Stay involved

SAFETY & HEALTH MANAGEMENT SYSTEM

- Safety & Health Management System vs Safety Program

ELEMENTS OF A SAFETY & HEALTH MANAGEMENT SYSTEM

- Management Commitment
- Employee Involvement
- Worksite Analysis
- Hazard Prevention & Control
- Training

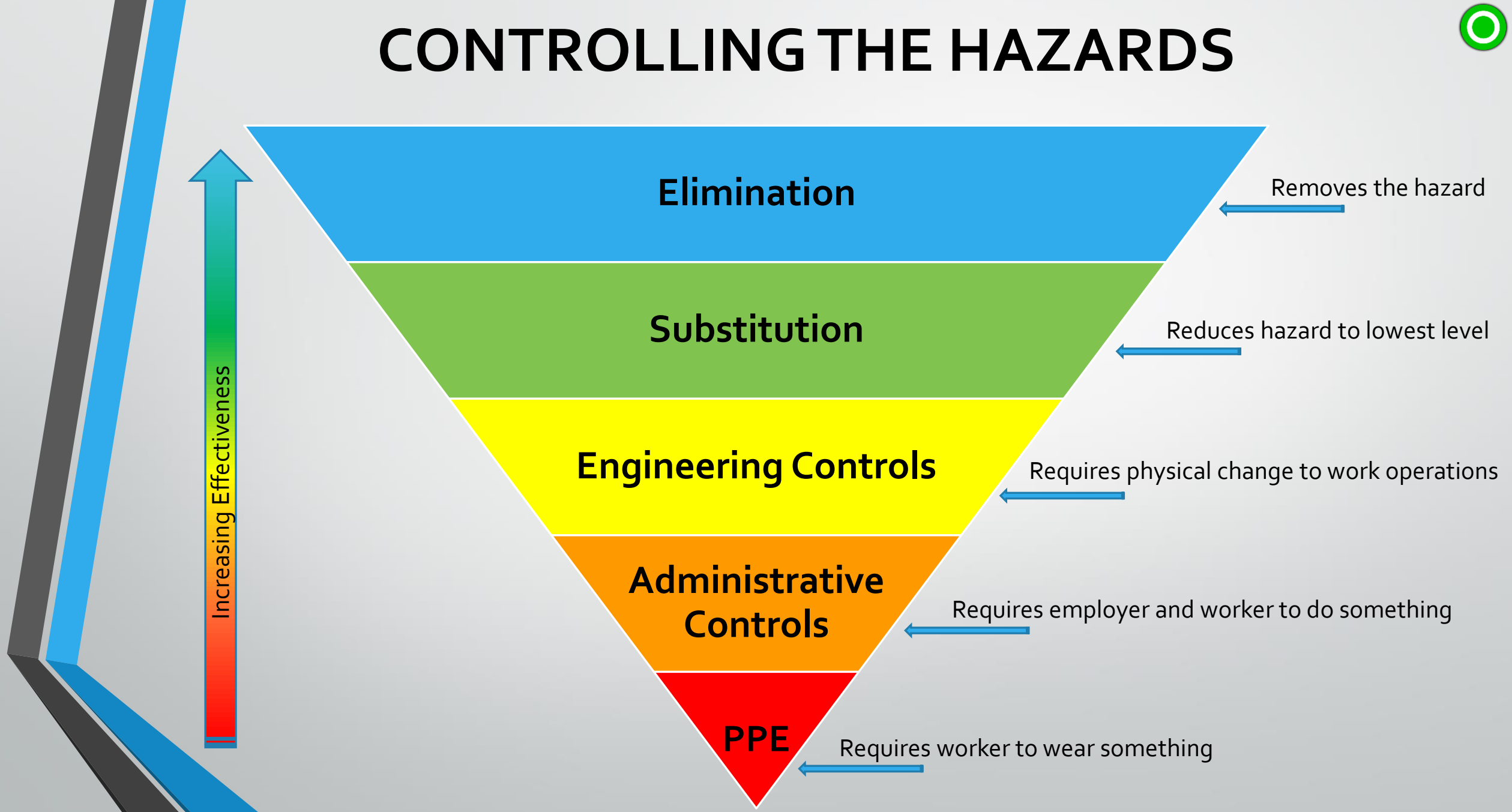
HAZARD PREVENTION & CONTROL

- **What does Hazard Control mean?**
  - Hazard control refers to workplace procedures adopted to minimize injury, reduce adverse health effects and control damage to plant or equipment. Hazard control practices are often standardized and taught to managers and safety personnel in a given industry. **Definition - Safeopedia**

HAZARD PREVENTION & CONTROL

- Effective controls:
  - Protect workers from workplace hazards
  - Prevent injuries, illnesses, and incidents
  - Minimize or eliminate safety and health risks
  - Provide workers with safe and healthy working conditions.

CONTROLLING THE HAZARDS



HIERARCHY OF CONTROLS

- Application of the hierarchy of controls is a systematic process to identify the most effective method of risk reduction.
- Select the highest level of control feasible.

ELIMINATION

- Eliminating the hazard—physically removing it—the most effective hazard control.

SUBSTITUTION

- Substitution – replacing something that produces a hazard with something that does not produce a hazard.

ENGINEERING CONTROLS

- To the extent feasible, the work environment and the job itself is designed to eliminate hazards or reduce exposure to hazards.

ENGINEERING CONTROLS

- Basic concepts
  - Design the facility, equipment, or process to remove the hazard
  - Enclose the hazard to prevent exposure
  - Establish barriers or local ventilation to reduce exposure to the hazard

ADMINISTRATIVE CONTROLS

- Administrative controls – procedures, training, signs and warning labels.
- Administrative controls do not remove hazards, but limit or prevent people's exposure to the hazards.

ADMINISTRATIVE CONTROLS

- Relief workers
- Exercise breaks
- Job rotation
- Frequent breaks

ADMINISTRATIVE CONTROLS

- General workplace rules and other operation-specific rules
- MIOSHA requirements
  - Respiratory Protection
  - Lockout/Tagout
  - Confined Space Entry
  - Hazard Communication
  - Blood borne Pathogens
  - Hearing Conservation

PERSONAL PROTECTIVE EQUIPMENT

- When exposure to hazards cannot be engineered out, and when safe work practices and other forms of administrative controls cannot provide sufficient additional protection.
- PPE is the least effective means of controlling hazards.

PERSONAL PROTECTIVE EQUIPMENT

- Assessment
- Select PPE
- Limitations and uses of PPE
- Train
- Employees use, store, and maintain PPE properly

DOCUMENTATION

- Document and address hazard controls in appropriate procedures, safety and health rules, inspections, training, etc.

FOLLOW UP STUDIES

- Conduct follow-up studies to ensure that hazard controls are adequate.

DISCIPLINARY PROCEDURES

- Written disciplinary system
- System enforced equally for both management and employees

EMERGENCIES

- Written procedures for emergencies.
- Drills
- Evaluation

PREVENTATIVE/PREDICTIVE MAINTENANCE

- Monitor and maintain machines and equipment to prevent failure, unplanned repairs or replacement

PREVENTATIVE/PREDICTIVE MAINTENANCE

- Written preventative/predictive maintenance system
- Manufacturers' recommendations, history, and generally recognized good industry practices.
- Detect hazardous failures before they occur

PROCESS SAFETY MANAGEMENT

- Chemicals and quantities
- PSM elements in place

OCCUPATIONAL HEALTH CARE

- Availability of physician services:
  - Hazard identification and analysis
  - Early recognition and treatment of illness and injury
  - System for limiting the severity of harm
- First aid
- CPR/AED
- Special programs – e.g.: audiograms
- Other medical tests

EXAMPLE

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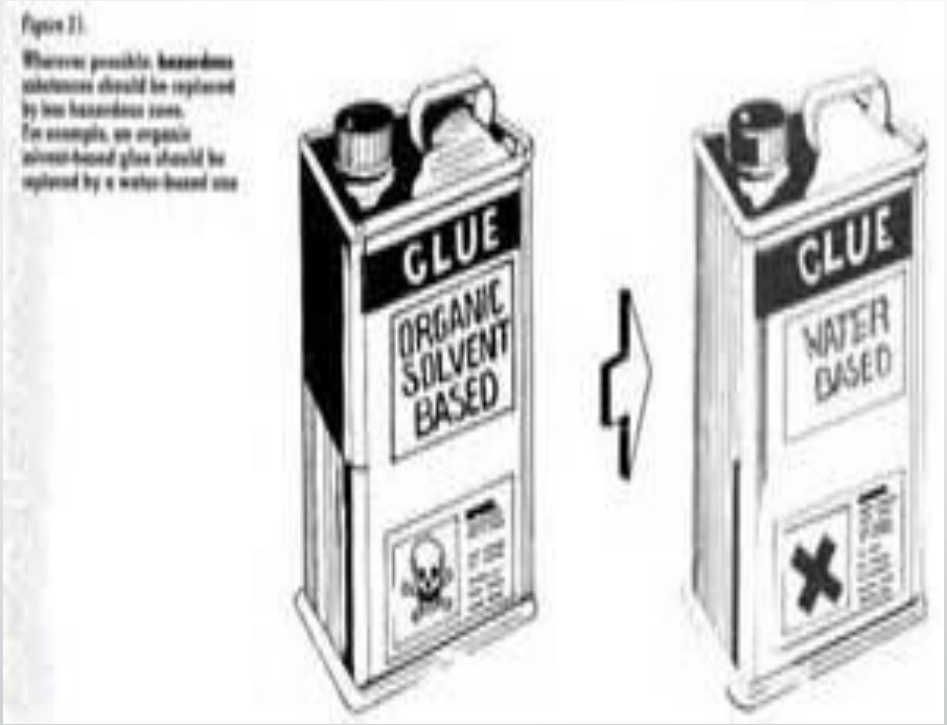

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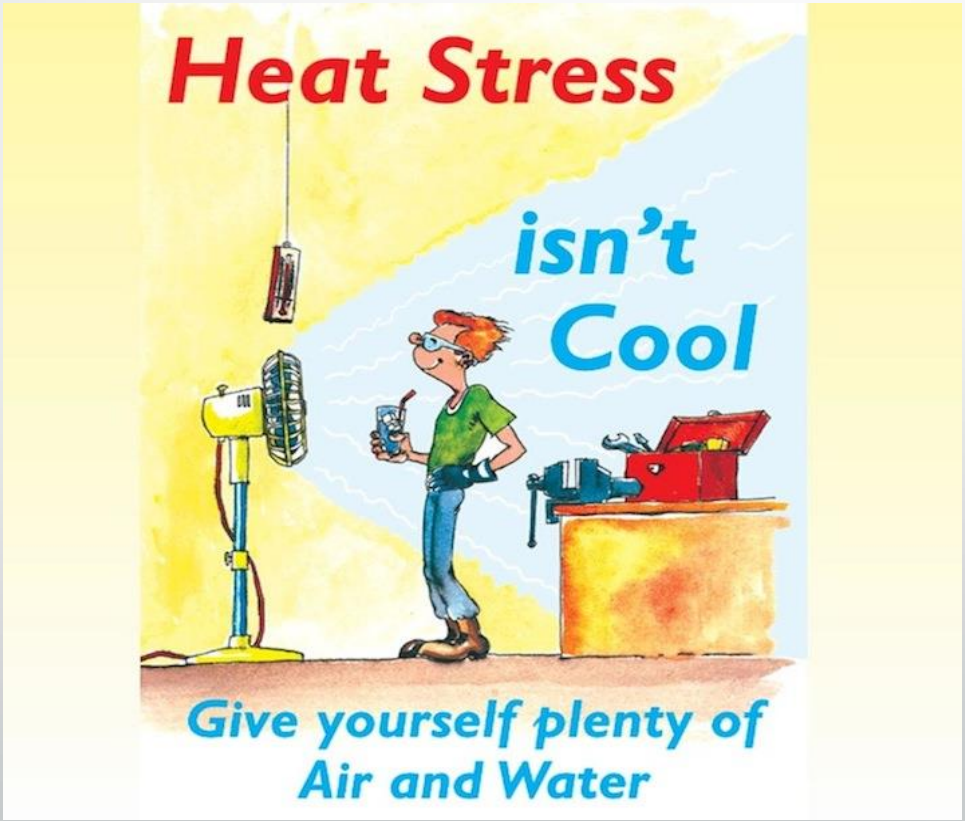

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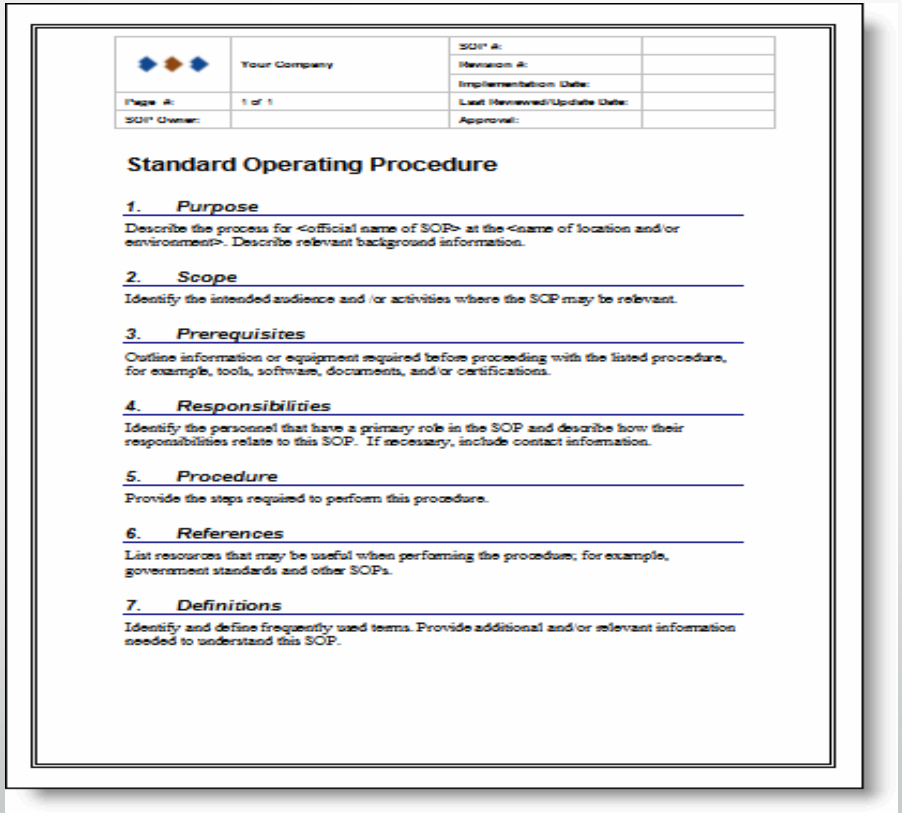

	Your Company	SOP #:	
		Revision #:	
		Implementation Date:	
Page #:	1 of 1	Last Reviewed/Update Date:	
SOP Owner:		Approval:	

Standard Operating Procedure

1. Purpose

Describe the process for <official name of SOP> at the <name of location and/or environment>. Describe relevant background information.

2. Scope

Identify the intended audience and /or activities where the SOP may be relevant.

3. Prerequisites

Outline information or equipment required before proceeding with the listed procedure, for example, tools, software, documents, and/or certifications.

4. Responsibilities

Identify the personnel that have a primary role in the SOP and describe how their responsibilities relate to this SOP. If necessary, include contact information.

5. Procedure

Provide the steps required to perform this procedure.

6. References

List resources that may be useful when performing the procedure; for example, government standards and other SOPs.

7. Definitions

Identify and define frequently used terms. Provide additional and/or relevant information needed to understand this SOP.

EXAMPLE

WRITTEN PROGRAM

HAZARD PREVENTION AND CONTROL

Our management will develop systems to prevent and control hazards. These include: the establishment of controls through engineering, work practice, personal protective equipment, and/or administrative actions; systems to track hazard correction; preventive maintenance systems; emergency preparation; and medical program.

Our written system will be implemented to assure guards, housekeeping, and personal protective equipment are provided and being used.

A written plan of action for the correction of hazards found in the workplace will be implemented by (Name/Title). Actions will be communicated to all employees.

A machine-specific maintenance schedule will be established by (Name/Title). Maintenance logs will be kept to document work performed and repairs scheduled or ordered.

Required written programs such as: lockout/tagout, respiratory protection, right to know, confined space, bloodborne infectious diseases, asbestos, benzene, lead, hearing conservation, and fork lift permits will be developed.

Copies of applicable MIOSHA standards will be located at (Location) for employee review or can be viewed on line at www.michigan.gov/mioshastandards.

Our supervisors will correct and reinforce safe and healthful work practices as part of their daily routine. Our written disciplinary procedure will assist in fair and consistent enforcement, and will include remedies and follow-up.

Through a team effort all employees at (Name of Establishment) will make "safety checks" a part of routine work practices.

LEGAL ASPECTS

- Compliance with MIOSHA standards and the general duty clause of the MIOSHA Act requires hazard identification and control as well as management leadership.
- Complying with standards indicates at least some level of the implementation of a the elements of a safety and health program.
- NOTE: Complying with existing safety and health standards is the minimum, and does not mean that an effective safety and health system is in place.


QUESTIONS

THANK YOU!!

- Making worksite safety & health a priority
- For all you do…every day…every job!

You Make a Difference in Health & Safety!